#### **ATTACHMENT II**

## LOUISIANA TECHNOLOGY INNOVATIONS FUND PROGRESS REPORT

### February 18, 2000

#### 1. DEPARTMENT/AGENCY

Academic Computing Section, LSU Medical Center-Shreveport

#### 2. PROJECT TITLE

Internet-based Videoconferencing for Education, Administration, and Healthcare

#### III. PROJECT LEADER

Name: Lee Bairnsfather, Ph.D.

Agency: Academic Computing Section, LSU Medical Center-Shreveport

Address: 1501 Kings Highway, Shreveport, LA 71130

Telephone: 318-675-6536 Fax: 318-675-7757 E-mail: lbairn@lsumc.edu

#### IV. DESCRIPTION OF THE PROJECT

The specific aims of the project are: (1) provide gateway technology between the present and the new, internet-based videoconferencing system; (2) build a demonstration testbed for the new, internet-based videoconferencing technology; (3) migrate the best components of the testbed to a production level system that will be used by the project partners; and (4) produce a report that will be a blueprint that can be replicated efficiently and economically by other education and state agencies.

#### 22. PROJECT STATUS

#### 1. Brief Summary

We have completed our initial investigations for network design and have built a LAN network to support the H.323 solution in Shreveport. Building the campus LAN involved installing a networking backbone, purchasing several codecs, and installing the MCU and gateway services. We are now designing and testing methods for providing the same services to remote sites.

#### 2. Accomplishments

Shreveport hosted a fact finding workshop for members of the project steering committee to understand the technology before deploying it. We have completed the

initial LAN design for Shreveport and consequently purchased and installed most of the necessary equipment. Components purchased and implemented include an MCU, several switches, and several codecs from various vendors. This solution has successfully also been connected to the NGI pilot backbone in Shreveport. Using this equipment we have performed successful H.323 conferences in Shreveport and also demonstrated connectivity between the H.323 systems and H.320 systems.

We have also developed a plan to allow other locations to traverse the NGI backbone and connect to the codecs and MCU services in Shreveport. Some of the needed equipment has been purchased and was successfully demonstrated at the end of February.

#### 3. Problems Encountered/Action Taken or Planned

We encountered some minor difficulty implementing the H.323 MCU services and gateway functionality. However, the vendor has since brought in an engineer who has stabilized the system. We are planning to upgrade the system to a new version of the code when released to solve any remaining instability problems.

## 4. Major Milestones (Original vs. Current Estimate)

Milestone	Current Status	Current Estimate
Prepare network	Design has been completed and 70% of	All evaluations should be
testbed	the equipment has been purchased and	complete and all equipment
	installed. The remaining LAN	purchased and installed by the
	equipment will be evaluated before	end of March.
	determining remaining purchases. See	
	attached network diagram for network	
	design.	
Install and test	6 codecs from 3 vendors have been	We still intend to evaluate codecs
H.323 systems	ordered and testing has started. We have	from at least 2 other vendors.
(Codecs, gatekeeper,	also ordered and installed the MCU and	Gatekeeper services will be
gateway, MCUs)	gateway features.	installed in by the end of March.
Conduct	Connectivity between H.320 and H.323	After testing criteria is
H.320/H.323	systems has been demonstrated.	developed, we expect to
interoperability tests	Currently developing testing	evaluate the performance and
	requirements to measure performance.	reliability of H.320 to H.323
		conferences using MCU
		gateway services. Testing is
		expected to begin by the end of
G 1 + H 222		February.
Conduct H.323	Connectivity has been demonstrated	After testing criteria is
multivendor	between systems. Currently developing	developed, we expect to
interoperability	testing requirements to measure	evaluate the performance and
testing	performance.	reliability of various codecs for
		point-to-point conferences and
		for multipoint conferences
		using MCU services. Testing is
		expected to begin by the middle of March.
		OI IVIAICII.

Milestone (cont.)	Current Status (cont.)	Current Estimate (cont.)
Establish production	Network design to include project partners	Connectivity will be
level system among	has been completed and equipment has	demonstrated by the end of
project partners	been ordered.	March to at least three remote
		sites. Bandwidth concerns will
		be addressed and managed by
		gatekeeper services.
		Production level conferences
		should be available in the next
		fiscal year.
Develop final report	The final report and blueprint has not been	This report will be addressed at
and "blueprint"	started.	the end of the next fiscal year
		after all testing has been
		completed.

# VI. COST VS. BUDGET

Financial report for the period of May 1, 1999 through Janu	ary 31, 2000
Funds received to date	\$600,000.00
Expenditures by category	
Operating services:	
Equipment maintenance	\$53,593.62
Supplies:	
Teaching & research	\$159.90
Professional Services:	
Bell South services	\$16,800.00
Equipment:	
Teaching & Research	\$174,365.60
Total expenditures	\$244,919.12
Open orders	\$62,086.91
Total expenditures plus open orders	\$307,006.03
Funds available at the end of January 31, 2000	\$292,993.97

# VII. ITEMIZED EXPENSES AND FINANCIAL OBLIGATIONS INCURRED DURING THIS REPORTING PERIOD